Freiburg University Hospital Complex

Patent claims

1. N-Glycosylated polypeptide, essentially comprising one of the following amino acid sequences:
amino acids 1-437 of sequence No. 2;
amino acids 1-409 of sequence No. 2;
amino acids 22-437 of sequence No. 2;
amino acids 22-409 of sequence No. 2;
or a fragment thereof containing at least 50 amino acids.

2. Polypeptide, essentially comprising one of the following amino acid sequences:
amino acids 1-437 of sequence No. 2;
amino acids 1-409 of sequence No. 2;
amino acids 22-437 of sequence No. 2;
amino acids 22-409 of sequence No. 2.

3. Essentially pure polypeptide of the sequence ID No. 2.

4. Polynucleotide, essentially comprising one of the following nucleotide sequences:
nucleotides 1-1600 of sequence No. 1;
nucleotides 36-1346 of sequence No. 1;
nucleotides 36-1262 of sequence No. 1;
nucleotides 39-1346 of sequence No. 1;
nucleotides 39-1262 of sequence No. 1;
nucleotides 99-1346 of sequence No. 1;
nucleotides 99-1262 of sequence No. 1.

5. Recombinant DNA which comprises a polynucleotide according to Claim 4.

6. Recombinant DNA according to Claim 5, characterized in that the nucleotide sequence is functionally linked to a promoter.

7. Expression vector, containing the recombinant DNA according to Claim 5 or 6.

8. Transformed or transfected host cell which contains a polynucleotide according to Claim 4.

9. Antibody against the PRV-1 polypeptide of one of Claims 1 to 3 or an epitope thereof.

10. Antibody according to Claim 9, characterized in that it is a monoclonal antibody.

11. Process for detecting polycythaemia vera, characterized in that the PRV-1 polypeptide is reacted, in an immunoassay, with one or more antibodies which is/are directed against the PRV-1 polypeptide or an epitope thereof.

12. Process according to Claim 11, characterized in that the antibody employed is a polyclonal or monoclonal antibody according to Claim 9.

13. Process for detecting polycythaemia vera, characterized in that the PRV-1 polynucleotide is detected using an RT-PCR method or a blotting method.

14. Drug for treating polycythaemia vera, characterized in that, in addition to customary excipients, it comprises polyclonal or monoclonal antibodies which are directed against PRV-1.

15. Drug, comprising a polypeptide according to one of Claims 1 to 3 and at least one pharmaceutically tolerated excipient.

16. Drug, comprising a polynucleotide according to Claim 4 and at least one pharmaceutically tolerated excipient.

17. Use of a polypeptide according to one of Claims 1 to 3 as a growth factor.

18. Use of a polypeptide according to one of Claims 1 to 3 for producing a drug for treating pancytopenias and pancytopathies in the bone marrow and in the circulation.

19. Use of a polynucleotide according to Claim 4 for producing a drug for treating pancytopenias and pancytopathies in the bone marrow and in the circulation.

20. Use of a polypeptide according to one of Claims 1 to 3 for treating and/or multiplying endogenous cells and/or established cell lines ex vivo or in vitro.

21. Kit for detecting polycythaemia vera, comprising
at least one polynucleotide according to Claim 4, or a fragment thereof,
and/or
at least one polypeptide according to one of Claims 1-3
and/or
at least one antibody according to Claim 9 or 10.

22. Kit for detecting disturbances of the haematopoietic system, comprising
at least one polynucleotide according to Claim 4, or a fragment thereof,
and/or
at least one polypeptide according to one of Claims 1-3
and/or
at least one antibody according to Claim 9 or 10.

23. Kit for detecting the PRV-1 protein according to Claim 21 or 22, characterized in that it is an ELISA test kit.